

**STATE OF ILLINOIS**  
**ILLINOIS COMMERCE COMMISSION**

|  |   |                    |
|--|---|--------------------|
| Verizon North Inc. (f/k/a/ GTE North           | ) |                    |
| Incorporated) and Verizon South Inc.           | ) |                    |
| (formerly known as GTE South Incorporated)     | ) |                    |
|  | ) | Docket No. 00-0812 |
| Petition seeking approval of cost studies      | ) |                    |
| for unbundled network elements, avoided        | ) |                    |
| costs and intrastate switched access services. | ) |                    |

**REBUTTAL TESTIMONY OF**  
**MICHAEL J. BOYLES**

**On Behalf of**  
**AT&T Communications of Illinois, Inc.**

**AT&T Exhibit 2.02**

**PUBLIC VERSION**

MARCH 15, 2002

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1    **I.       INTRODUCTION**

2    **Q.       PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3    A.       My name is Michael J. Boyles. My business address is 1201 Eye Street, N.W.;

4           Suite 400; Washington, DC 20005.

5    **Q.       ARE YOU THE SAME MICHAEL J. BOYLES WHO PREVIOUSLY FILE**

6           **DIRECT TESTIMONY IN THIS PROCEEDING?**

7    A.       Yes, I am.

8    **Q.       WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

9           The purpose of my testimony is to respond to portions of the rebuttal testimony of

10          Verizon witness Tucek filed January 4, 2002.

11   **Q.       HOW IS YOUR TESTIMONY ORGANIZED?**

12   A.       My testimony is organized in a manner similar to my direct testimony but here,

13          each section addresses the criticisms regarding that section's topic. The

14          remainder of my testimony is organized into six sections. Section II summarizes

15          my conclusions. Section III addresses the criticisms regarding my general

16          modeling issues within ICM. Section IV addresses the criticisms regarding my

17          ICM, SCIS and CostMod switching issues. Section V addresses the criticisms of

18          my issues regarding the way in which Verizon calculates costs. Section VI

19          addresses the criticisms regarding my recommendations on what adjustments

20          could be made to compensate for some of the shortcomings I identified in the

21          models. Section VII presents my overall conclusion of Mr. Tucek's criticisms.

1     **II.     SUMMARY**

2     **Q.     PLEASE SUMMARIZE YOUR TESTIMONY.**

3     A.     The majority of my rebuttal testimony addresses Mr. Tucek’s criticisms of my  
4             direct testimony, each of which have varying effects on switched access costs  
5             calculated using ICM. However, in his zeal to rebut my adjustments to ICM  
6             inputs – which lowered the switched access costs calculated by Verizon for end  
7             office switching and tandem switching – Mr. Tucek makes two statements that  
8             overshadow all of his other criticisms. He admits that the discounts used to  
9             reduce investments calculated by the SCIS and CostMod switching models were  
10            too low. He also admits that the modeled clusters upon which Verizon develops  
11            its costs differ from that of the wire centers in Illinois. These two admissions  
12            alone suggest that the Illinois Commission should reject the switched access costs  
13            calculated by Verizon in Illinois. In addition, I still view the ICM model and  
14            supporting documentation as inflexible and not particularly open to inspection so,  
15            it too should be rejected by the Commission.

16    **III.    ICM GENERAL MODELING ISSUES**

17    **Q.     WHICH OF THE STATEMENTS IN YOUR DIRECT TESTIMONY DOES**  
18    **MR. TUCEK ADDRESS REGARDING YOUR GENERAL CRITICISMS**  
19    **OF ICM?**

20    A.     He addresses my statements regarding Verizon’s engineering practices and  
21             operating characteristics and ICM’s flexibility, testability and openness.

1 **Q. WHAT IS YOUR UNDERSTANDING OF MR. TUCEK'S POSITION**  
2 **REGARDING YOUR POSITION ON VERIZON'S ENGINEERING**  
3 **PRACTICES, OPERATING CHARACTERISTICS AND EFFICIENCIES?**

4 A. As I understand his testimony, Mr. Tucek claims that I never specifically support  
5 how or why Verizon's engineering practices and operating characteristics are  
6 inefficient (Tucek Rebuttal; p. 24) but he then later states that I have suggested  
7 ICM uses historical or embedded costs and claim that is inefficient. (Tucek  
8 Rebuttal; p. 32) He does not understand or has mischaracterized my statement,  
9 which is based on Verizon not excluding inefficiencies with respect to the  
10 selection of switching technology. (Boyles Direct; p. 7)

11 **Q. WHY DO YOU CONSIDER VERIZON'S ENGINEERING PRACTICES**  
12 **AND OPERATING CHARACTERISTICS AS INEFFICIENT AND,**  
13 **THEREFORE, IN VIOLATION OF TELRIC PRINCIPLES?**

14 A. I found that the stand-alone, host and remote switches served relatively few lines  
15 compared to their capacity. This contributes to a high switch investment per line,  
16 which inflates costs. Verizon based its switch selection on the switch  
17 technologies in its current network, without any verification that this is the most  
18 efficient network. Therefore, a switching network based on current/historic  
19 technologies, without eliminating any inherent inefficiencies, violates TELRIC  
20 principles. If a lower cost technology can provide the same functionality as a  
21 higher cost technology, then that is more efficient. Mr. Tucek suggests my  
22 statements are analogous to someone who drives 40 miles an hour, but buys a car  
23 that can go 100 miles per hour, has bought too much car. (Tucek Rebuttal; p. 22)  
24 An analogy that represents my point more accurately is that someone doesn't need  
25 to buy a nine passenger van when no more than two people will use it.

1 **Q. WHAT DOES MR. TUCEK CRITICIZE ABOUT YOUR STATEMENT**  
2 **REGARDING ICM'S FLEXIBILITY AND TESTABILITY?**

3 A. Mr. Tucek states that only 1,397 records in the switch investment table would  
4 require manual entry and only if a change was relevant to all switches<sup>1</sup>. He also  
5 suggests a user could develop an interface using a commercially available  
6 database program or a programming language. (Tucek Rebuttal; pp. 65-66)

7 **Q. HAS MR. TUCEK'S COMMENTS CHANGED YOUR VIEW OF ICM'S**  
8 **FLEXIBILITY AND TESTABILITY?**

9 A. No. In response to Ms. Buckley's concerns, Mr. Tucek doubts whether any party  
10 would consider entering 510 values one at a time as easy or flexible – and I agree.  
11 (Tucek Rebuttal; p. 55) He takes a different position when addressing my  
12 concerns, even though I would have to change more than twice as many values.

13 **Q. WHAT WAS MR. TUCEK'S RESPONSE TO YOUR COMPLAINT THAT**  
14 **MUCH OF THE SUPPORTING DOCUMENTATION WAS PROVIDED IN**  
15 **A PDF FORMAT?**

16 A. Mr. Tucek explained that Verizon provided the supporting documentation in PDF  
17 format as a more efficient substitute for hard copy documentation and that this  
18 allowed other parties to narrow the focus of their requests to relevant Excel  
19 spreadsheets. (Tucek Rebuttal; pp. 67-68)

20 **Q. DO YOU AGREE WITH HIS EXPLANATION?**

21 A. I agree that PDF files are an efficient substitute for hard copy documentation, but  
22 I disagree that they allow parties to narrow the focus of their requests to relevant  
23 Excel spreadsheets. Parties would not have to ask for the underlying spreadsheets

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<sup>1</sup> I note that a change to each technology's switch discount would be relevant to all switches, and I believe Verizon uses switch discounts that are too low.

1 if Verizon provided the spreadsheets in the first place. It's important to note that  
2 Verizon has to go through an additional step to create a PDF files from each  
3 spreadsheet when they could more easily just provide the spreadsheet itself.  
4 While Verizon objected on the grounds of burden when I requested all the  
5 underlying spreadsheets, I believe it is more burdensome to require parties to  
6 request the underlying spreadsheets by name. (Tucek Rebuttal Attachment DGT-  
7 7, p. 2) Verizon's position requires parties to review all PDF files to determine  
8 those names<sup>2</sup>. The burden would be removed from all parties if Verizon initially  
9 provided the original spreadsheets. This is actually less burdensome for Verizon  
10 since they would avoid the additional step of creating the PDF file.

#### 11 **IV. ICM SWITCHING ISSUES**

##### 12 **A. Technology Selection Issues**

13 **Q. IS MR. TUCEK'S CLAIM AT PAGE 22 THAT YOUR RESPONSE TO**  
14 **VERIZON DATA REQUEST VZ-ATT 2.02 CONTRADICTS YOUR**  
15 **DIRECT TESTIMONY ACCURATE?**

16 A. No. My direct testimony observes that modeling unnecessarily large switches  
17 results in high investments per line. (Boyles Direct; p. 11) Modeling overly large  
18 switches is one contributing factor to high investments per line. Another factor is  
19 the discount used to generate those investments, which I address in more detail  
20 below. My response to Verizon Data Request VZ-ATT 2.02 states that I  
21 recommend using the switching technology with the lowest investment per line.

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<sup>2</sup> Verizon's apparent viewpoint is that requesting the spreadsheets in general is not really a request for the spreadsheets. They require specific references.

1 (Tucek Rebuttal Attachment DGT-7; p. 14) Since the DMS-10 and DMS-100  
2 switches have the lowest investment per line for the six smaller switch sizes, and  
3 my adjustment to the Investment Adjustment Factor sets the investments to these  
4 lower investments per line, that effectively selects a lower cost and better sized  
5 technology, which is consistent with my direct testimony.

6 **Q. WHAT IS YOUR RESPONSE TO MR. TUCEK'S CLAIM THAT THE**  
7 **GTD-5 IS A FORWARD-LOOKING TECHNOLOGY?**

8 A. Mr. Tucek points out that in April 1997, BC TEL signed a volume purchase  
9 agreement with AGCS to purchase GTD-5 Class 5 digital switching equipment.  
10 (Tucek Rebuttal; pp. 22-23) However, he doesn't indicate whether those are new  
11 host switches or merely remotes to add to their existing network. Verizon itself  
12 purchased at least one GTD-5 remote for its existing network as late as 1998, but  
13 had not purchased at GTD-5 host since 1989. I assume Verizon purchased the  
14 remote in order to maintain compatibility with its assigned end office switch. In  
15 Illinois, Verizon has not installed a GTD-5 host switch in over a decade, implying  
16 that Verizon is moving away from that technology. Mr. Tucek also points out that  
17 the Michigan Public Service Commission found the GTD-5 switch to be forward-  
18 looking, however, that does not override Verizon's practices in Illinois.

19 **B. Investment Issues**

20 **Q. DO YOU AGREE WITH MR. TUCEK'S CLAIMS THAT THE**  
21 **SWITCHING COSTS USED BY ICM ARE NOT OUTDATED AND THAT**  
22 **THERE IS NO TREND OF DECREASING SWITCH PRICES?**

23 No. Mr. Tucek claims that the switch list price information must come from 1999  
24 in order to be consistent with the use of 1999 ARMIS data. (Tucek Rebuttal; p.



1 68) He also states that the expense-to-investment ratios are calculated from  
2 adjusted operating expenses divided by the forward-looking investments modeled  
3 by ICM on a per-unit basis. (Tucek Rebuttal; p. 32) However, the use of  
4 expense-to-investment ratios is a short-handed means of determining operating  
5 expenses. These ratios can then be applied to forward-looking switching  
6 investments, which are not by definition bound by the 1999 data from which they  
7 are derived. Therefore, it would not have been inconsistent for Verizon to apply  
8 its expense-to-investment ratios on switching information later than 1999.

9 In discussing the report from Huber and Leo regarding declining switching prices  
10 that I quoted in my direct testimony, Mr. Tucek states that the information relied  
11 upon is outdated and that the decrease in switching costs is unsupported. (Tucek  
12 Rebuttal; p. 69) He says these are outdated because they precede the date the  
13 report was published by more than a year, but Verizon's switching costs are  
14 outdated by almost three years, at this point.

15 Verizon's own data supports my claim that switching prices are dropping in  
16 general. The C.A. Turner indices provided in Tucek Rebuttal Attachment DGT-1  
17 show that the index for account 221200 – Digital Electronic Switching is  
18 [[XXXXXX]]. This index adjusts costs to reproduction costs. (Tucek Rebuttal; pp.  
19 28-29) Obviously, an index less than one indicates that these costs are dropping.

1   **Q.    CONSIDERING MR. TUCEK’S ARGUMENTS REGARDING SWITCH**  
2   **DISCOUNTS, DO YOU STILL CONSIDER THE SWITCH DISCOUNTS**  
3   **USED BY VERIZON TO BE TOO LOW?**

4   A.    Yes, I do. Mr. Tucek argues that Mr. Zolnierrek is wrong when he calculated that  
5   the switch cost for Golconda (wire center GLCNILXEDS1) modeled by SCIS is  
6   57 percent greater than the amount paid for the switch in 1998. (Tucek Rebuttal;  
7   pp. 39-40) While he calculates that the switch cost modeled in SCIS is actually  
8   only 34 percent greater, that is still a significant difference!

9   Mr. Tucek explains that this difference is because the actual realized discount for a  
10   switch configured like the Golconda switch ([[XXXX]] percent) is greater than the  
11   average discount used by ICM ([[XXXX]] percent) for a switch of that type and  
12   size. He admits that the switch discount used in SCIS is too low. He rationalizes  
13   the use of the average switch discount by claiming that using the discount by line  
14   size increases the switched access costs. However, his analysis is wrong.

15   **Q.    PLEASE DESCRIBE WHAT YOU BELIEVE IS WRONG WITH MR.**  
16   **TUCEK’S ANALYSIS?**

17   Mr. Tucek calculates an investment adjustment factor (“IAF”) based on the ratio  
18   of the line size specific discount divided by the average discount. (Tucek  
19   Rebuttal; p. 71) His error is that he should have used the ratio of the resulting  
20   investments, not the discounts. The resulting investment is defined as one minus  
21   the discount. For line size specific discounts that were higher than the average  
22   discount, Mr. Tucek calculated an investment adjustment factor that is greater  
23   than one, increasing the investment. Obviously, a higher discount should produce

1 lower investment. Contrary to Mr. Tucek's comment on page 69, I *do* understand  
2 the function of the discounts used in Verizon's SCIS and CostMod runs.

3 **Q. WHAT IS THE MAGNITUDE OF THIS ERROR?**

4 A. I compared the results on total switching investment of applying Mr. Tucek's  
5 switch specific investment adjustment ratio to that of the corrected switch specific  
6 investment adjustment ratio<sup>3</sup>. Mr. Tucek's methodology *increased* total switching  
7 investment 4 percent ([[XXX]] million). My corrected methodology *decreased*  
8 total switching investment 13 percent ([[XXX]] million).

9 **Q. WHAT DO YOU CONCLUDE FROM YOUR CORRECTED ANALYSIS?**

10 A. I conclude that the switch discounts used by Verizon were too low. The average  
11 switch discounts used by Verizon overstates switch investment and, therefore,  
12 overstates costs. Additionally, Verizon's line size specific discount used to  
13 develop its average discount is lower than the actual realized discount for  
14 Golconda. Using the actual discount would further reduce the switching  
15 investment.

16 **Q. DO YOU STILL HAVE CONCERNS REGARDING THE RIGHT-TO-USE**  
17 **FEES THAT VERIZON ADDED AS A SEPARATE INPUT TO SCIS?**

18 A. Yes. I cannot verify the right-to-use fees ("RTUs") included by Verizon since I  
19 have not seen the contracts Mr. Tucek alludes to in connection with the switch  
20 purchase and a national contract. (Tucek Rebuttal; p. 72) Additionally, Mr.

21

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<sup>3</sup> I define the total switching investment as the sum of investment type L0001 in the ICM switch investment table

1 A. Tucek states that the RTU fees purchased under the national contract provide for a  
2 *standard set of end-user features* by switch type as well as upgrades to the  
3 operating system and need to be input into SCIS. However, the SCIS/MO input  
4 screen for entering getting started investments states, “If capitalizing RTU fees,  
5 enter non-feature related material amount to include in the GS Investment:  
6 Range: 0 – 9,999,999 Typical Value: 0” This SCIS/MO help message implies  
7 that Mr. Tucek erred by including RTU fees for a standard set of end-user  
8 features.

9 **C. Growth Issues**

10 **Q. DO YOU BELIEVE THAT MR. TUCEK UNDERSTANDS YOUR**  
11 **COMMENTS REGARDING ICM’S INVESTMENT ADJUSTMENT**  
12 **FACTOR?**

13 A. I don’t believe he does. First, he says I’m wrong in stating that the investment  
14 adjustment factor (“IAF”) is used to reflect line and trunk growth in switches.  
15 (Boyles Direct; p. 17) However, he describes the IAF in the same manner.  
16 (Tucek Rebuttal; p. 70 and 72) Second, he suggests the Commission disregard  
17 my statement that the present value of the additional lines should be included in  
18 the denominator of the cost-per-line calculations. I will provide an example that  
19 demonstrates the present value of the lines should be included.

20 Suppose a switch has 100 lines installed initially at \$50 per line for a total  
21 investment of \$5,000. Suppose also that 1 line is added for each of the next three  
22 years at the same \$50 per line and that there is no inflation. Mr. Tucek would  
23 calculate the IAF as 1.03. (\$5,150 ending investment divided by \$5,000 initial

1 investment equals 1.03) However, the total investment (\$5,150) divided by the  
2 total lines (103) equals 1.00. The IAF of 1.00 is obviously correct because  
3 without inflation, the total investment per line stays the same. Otherwise, the 100  
4 lines initially installed are paying for the future growth. This IAF problem is  
5 compounded when applied to switch investments that are already overstated from  
6 using discounts that are too low.

7 **Q. WHAT RESPONSE DO YOU HAVE TO MR. TUCEK'S COMMENTS**  
8 **ABOUT YOUR ADJUSTMENT REQUIRING THE IAF TO BE**  
9 **COMPUTED OVER THE LIFE OF THE SWITCH?**

10 A. Mr. Tucek says that my suggested change to the IAF only makes sense if one  
11 were computing an average cost per line over the entire life of the switch. (Tucek  
12 Rebuttal; p. 73) He goes on to say that the line and trunk additions used in the  
13 development of the IAF inputs do not include the required additional equipment.  
14 As I explained in my direct testimony, the projected rate of reduction in switch  
15 prices should offset the incremental costs per line used by Verizon. (Boyles  
16 Direct; p. 17) Therefore, no additional information is required from a cost  
17 perspective. His error in calculating his IAF does not mean my recommendation  
18 is invalid.

19 **D. Switching Cost Model Input Issues**

20 **Q. DO YOU STILL HAVE CONCERNS REGARDING VERIZON'S**  
21 **CALCULATED PROCESSOR UTILIZATION FACTORS?**

22 A. Yes. While Mr. Tucek states that the processor utilization factors ("PUFs") input  
23 into SCIS are consistent with processors reaching exhaust before lines and that  
24 these PUFs only include the processing portion of the available real time, the

1 DMS-10 example he cites implies the switch will still be *line* constrained. (Tucek  
2 Rebuttal; p. 76). I explained that today's switches are rarely processor  
3 constrained in my direct testimony. (Boyles Direct; p. 18) Taking the highest  
4 PUF calculated by Verizon for its DMS-10 modeled clusters and adding the 35  
5 percent of the processor real time used for administrative tasks identified by Mr.  
6 Tucek still only comes to **[[XXXX]]** percent, which implies the switch is line  
7 constrained. I note that the highest PUF entered into SCIS for a DMS-10 switch  
8 in Illinois is **[[XXXX]]** percent, far below Verizon's calculated maximum, which  
9 further suggests these switches are line constrained.

10 **Q. DO THE SCIS/IN INVESTMENTS INCREASE IF THE CALL**  
11 **COMPLETION RATIO IS CHANGED FROM 100 TO 65 AS SUGGESTED**  
12 **BY MR. TUCEK?**

13 A. No. The SSP Octet investment *decreases* when the call completion ratio is  
14 reduced from Verizon's value of 100 to a value of 65. Again, note that Verizon  
15 uses a call completion ratio of 65 in its ICM model. The change to the SCIS/IN  
16 call completion input affects the Trunk-to-Line Call Setup, Line-to-Trunk Call  
17 Setup and Trunk-to-Trunk Call Setup usage features costs. Mr. Tucek incorrectly  
18 states those costs increase. (Tucek Rebuttal; p. 76)

19 Mr. Tucek also states that setting the call completion ratio to 100 prevents the  
20 user from having to rerun SCIS/IN. I assume this is to avoid having to rerun  
21 SCIS/IN and go through the exercise of importing the values back into ICM. He  
22 may not endorse setting the call completion ratio to 100 in SCIS/IN if it were easy  
23 to import adjusted values back into ICM.

1           **E. Factors Issues**

2   **Q.    WHAT IS YOUR RESPONSE TO MR. TUCEK’S CRITICISMS ABOUT**  
3   **YOUR USE OF AN ALTERNATIVE EF&I FACTOR?**

4   A.    First, Mr. Tucek’s suggestion that the 30 percent EF&I figure recommended by  
5           the New York ALJ only reflects engineering and installation ignores his own  
6           quote from the ALJ which states, “ ... making for an overall EF&I factor of  
7           30%.” (Tucek Rebuttal; p. 81, line 1827) This 30 percent factor is an *overall*  
8           factor and does NOT just reflect engineering and installation.

9           Second, using this figure is not at odds with TELRIC principles. Mr. Tucek states  
10          that the TELRIC standard should reflect the costs ILECs actually expect to incur.  
11          (Tucek Rebuttal; p. 81) However, if the costs ILECs actually expect to incur are  
12          based on historical costs, as Verizon’s supporting documentation appears to rely,  
13          and those costs are not forward-looking, then *that* violates the TELRIC standard.

14          Third, I relied upon a recommended decision because that was the best alternative  
15          evidence I could find. While the information is not specific to Illinois, it is  
16          Verizon’s costs and therefore should be comparable. Verizon Illinois’ **[[XXXX]]**  
17          percent EF&I factor applied to the switching material investment of **[[XXXX]]**  
18          per line equates to **[[XXXX]]** per line<sup>4</sup>. (Tucek Rebuttal; p. 83) Verizon New  
19          York’s proposed 43.5 percent EF&I applied to \$128 per line equates to \$55.68.  
20          Verizon uses a **[[XX]]** percent *higher* EF&I per line value in Illinois than it used  
21          in New York.

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<sup>4</sup> I do not know the difference between the **[[55.5]]** percent EF&I factor I calculated for all Illinois switches compared to Mr. Tucek’s factor of **[[51.8]]** percent.

1 Fourth, Mr. Tucek's argument that my downward revision is more than 1.6 times  
2 as great as the 135 basis point decrease recommended by ALJ for Verizon New  
3 York is only true if the ALJ recommended a relative reduction in the EF&I factor.  
4 (Tucek Rebuttal; pp. 82-83) However, the ALJ recommended an EF&I factor in  
5 absolute terms so this argument does not apply.

6 Fifth, Mr. Tucek's observation that using an across the board EF&I is not realistic  
7 because the relative amount of engineering cost declines with switch size means  
8 that I actually overstate the EF&I costs in larger switches. (Tucek Rebuttal; p. 83)  
9 I also note that the EF&I factors proposed by Verizon Illinois for the GTD-5 and  
10 5ESS switches actually increase with switch size, which is contrary to Mr.  
11 Tucek's own observation. Additionally, the ALJ recommended an average to be  
12 applied to all switches recognizing that not all the switches in New York are the  
13 same size.

14 Finally, I acknowledge the link between the EF&I factor and the switch  
15 investment. The ALJ's 30 percent EF&I applied to Verizon New York's \$128 per  
16 line investment equates to \$38.40 per line. This \$38.40 per line for EF&I  
17 compared to my adjusted [[XXXXXX]] investment per line equates to [[XXXX]]  
18 percent, which is only [[XX]] basis points higher than the ALJ's recommendation.  
19 This is much smaller than the 218 basis points identified by Mr. Tucek. (Tucek  
20 Rebuttal; p. 83)



1    **V.     ICM COST CALCULATION ISSUES**

2    **Q.     DO YOU BELIEVE THAT MR. TUCEK UNDERSTANDS YOUR**  
3    **ADJUSTMENT TO THE CALL SETUP INVESTMENTS?**

4    A.     I don't believe he does. I removed all the getting started investments from the  
5           SCIS usage features. These costs should be allocated to the port because switches  
6           are rarely processor constrained. (Boyles Direct; pp. 20-21 and 22-23) Mr.  
7           Tucek states that SCIS assigns only a fraction of the getting started to line  
8           terminations. (Tucek Rebuttal; p. 83) That is exactly my point. SCIS should  
9           assign *all* of the getting started costs to the port (a.k.a. line termination).  
10          Therefore, I removed *all* the getting started costs from the usage.

11          Mr. Tucek states that CostMod also assigns a portion of its getting started costs to  
12          line terminations, but then goes on to say that my adjustment to the GTD-5  
13          getting switching investments are inappropriate. (Tucek Rebuttal; p. 83) He  
14          describes that both SCIS *and* CostMod assign some of the getting started costs to  
15          line termination, so my adjustment is appropriate for the investments derived by  
16          *both* models.

17          Mr. Tucek then attempts to demonstrate the magnitude of how SCIS handles  
18          getting started investment on the end office switching and tandem switching costs  
19          by eliminating just the line termination portion from the getting started  
20          investment. His results show a small decrease in costs. That is exactly what he  
21          should have expected because he already said only a fraction of the getting started  
22          costs are assigned to line terminations. In other words, he removed a little  
23          investment and observed a small change in the resulting costs.

1 Lastly, Mr. Tucek attempts to quantify the impact on the port cost of shifting the  
2 getting started investment from usage to the port. He notes that his small shift in  
3 investment increases the port cost less than his attempt to quantify my larger shift  
4 in investment. Like his previous demonstration and assuming his analysis is  
5 correct, this is not surprising. In fact, my direct testimony stated that shifting the  
6 getting started investment from usage to the port will increase the port cost.  
7 (Boyles Direct; p. 20) If that investment shift is done correctly, the decrease in  
8 the usage costs will be exactly offset by the increase in the port cost, although the  
9 relative change in each of those costs may not be the same.

10 **Q. IS MR. TUCEK'S ASSERTION ACCURATE THAT YOUR MAIN**  
11 **OBJECTIVE IS TO ADVOCATE REDUCED COSTS AT WHATEVER**  
12 **MANNER POSSIBLE, IN PARTICULAR WITH RESPECT TO SALES,**  
13 **MARKETING AND ADVERTISING COSTS?**

14 A. Not at all. My direct testimony stated that switched access is not something that  
15 needs to be marketed. Mr. Tucek's rebuttal identifies only 12 percent of sales  
16 (expense account 6612) and 4 percent of product advertising (expense account  
17 6613) indicates that switched access consumes only a small portion of those  
18 accounts. (Tucek Rebuttal; pp. 76-80) While we disagree on the magnitude of  
19 the SMA costs, Mr. Tucek's percentages acknowledge that they are a small  
20 fraction of the total sales and advertising expense accounts.

21 The adjustment I recommended only reduced my proposed switched access rates  
22 by 0.3%. My main objective is to correct errors in Verizon's ICM inputs at  
23 whatever the magnitude.

1   **VI.    ICM INPUT ADJUSTMENTS**

2   **Q.    WHAT RESPONSE DO YOU HAVE TO MR. TUCEK’S CRITICISMS**  
3   **REGARDING YOUR COST PER LINE ADJUSTMENTS?**

4   A.    Mr. Tucek identifies three reasons why my claim that the switch costs per line  
5       generated by SCIS and CostMod are higher than Verizon’s target per line switch  
6       costs. (Tucek Rebuttal; pp. 75-75) First, he states that the mix of host and remote  
7       lines underlying the modeled clusters differs from that of the wire centers in  
8       Illinois. It is my opinion that this one statement undermines the very foundation  
9       of Verizon’s entire switch investment development. Verizon bases its switch  
10      discounts on these same relationships, which Mr. Tucek now admits do not  
11      pertain to Illinois. Even in the absence of the host of other errors I have  
12      identified, I believe this one statement alone should cause the Commission to  
13      reject Verizon’s proposed switched access rates.

14      Second, Mr. Tucek points out that line size is not the only determinant of switch  
15      costs, and I agree that it is not the *only* determinant. However, his own statistical  
16      analysis shows that line size is statistically significant in determining switching  
17      investment.

18      Finally, Mr. Tucek says Verizon did not endeavor to hit some target per-line  
19      switching cost, but that’s exactly how Verizon developed its discounts. Mr.  
20      Tucek explains that “[t]he discount inputs used in the SCIS and CostMod runs  
21      were developed to scale the list prices used in these models to a level comparable  
22      to the switching prices Verizon pays these vendors for an initial switch purchase.”  
23      (Tucek Rebuttal; pp. 69-70) If he considers it invalid for me to hit some target

1 per-line switching cost, then his discount calculation suffers from the same  
2 problem.

3 **Q. WHAT RESPONSE DO YOU HAVE TO MR. TUCEK'S CRITICISMS**  
4 **REGARDING YOUR IAF ADJUSTMENTS?**

5 A. Mr. Tucek says my analysis contains several errors and is conceptually flawed.  
6 (Tucek Rebuttal; pp. 85-87) While some of his individual observations are  
7 correct, most of his conclusions are wrong.

8 First, he is right that I used per-line investment based on a host/remote cluster for  
9 a wire center that is a stand-alone base unit, and vice versa. However, the reason  
10 for that is because those are the only modeled cluster sizes and configurations for  
11 which Verizon provided information.

12 Second, he is again right that I used a per-line investment that corresponds to a  
13 cluster size smaller than the total of the host and remote lines. However, that was  
14 intentional. I used the mid-point between the modeled clusters as my break point.  
15 For example, the two smallest modeled clusters have 700 and 1700 lines. The  
16 target DMS-100 investment per line for a 700 line switch is [[\$XXXX]] and for a  
17 1700 line switch is [[\$XXXX]]. By using the mid-point between the modeled  
18 clusters as my break point – in this case 1200 lines – a switch with 701 lines  
19 would have a target investment of the 700 line switch, instead of the 1700 line  
20 switch. I believe a 701 line switch has more in common with a 700 line switch  
21 than a 1700 line switch.

1 Third, he said my adjustments to the ICM input tables did not obtain my intended  
2 results because the results reflect only the switching investments produced by  
3 SCIS and CostMod. While my intended result was to adjust the switching  
4 investments, he is right that I did not implement my adjustments correctly. For  
5 example, my adjustment to the investment adjustment factor was not reflected in  
6 my change to the ICM usage investments. Had I done so, I expect that the  
7 switched access costs I identified in my direct testimony would have been even  
8 lower. (Boyles Direct; p. 24) This further reinforces the fact that Verizon's  
9 switched access costs are too high.

10 Fourth, Mr. Tucek said that is was incorrect to base my average per-line cost on  
11 the cluster. However, Verizon used modeled clusters so I based my adjustments  
12 on clusters to remain consistent.

13 Finally, he says I have not considered whether Nortel and Lucent could provide  
14 the 270 base units and remotes necessary to implement the proposal. However,  
15 my adjustments are used to correct Verizon's ICM inputs in order to make them  
16 forward-looking and efficient. Mr. Tucek says my most serious flaw is that "...  
17 Verizon is not going to replace the switches in its wire centers with the switch  
18 with the minimum of the so-called "target" cost per line." (Tucek Rebuttal; p. 86)  
19 Nothing in my direct testimony or this testimony suggests I expect Verizon to  
20 replace all of its switches. This adjustment is used to determine TELRIC based  
21 costs.

1   **VII. CONCLUSIONS**

2   **Q.   WHAT ARE YOUR CONCLUSIONS REGARDING THE CRITICISMS**  
3   **IDENTIFIED BY MR. TUCEK IN HIS REBUTTAL TESTIMONY**  
4   **REGARDING YOUR DIRECT TESTIMONY?**

5   A.   In his rebuttal testimony, Mr. Tucek pointed out that the average discounts  
6       calculated by Verizon using the modeled clusters are too low. On top of that, Mr.  
7       Tucek himself stated that the mix of host and remote lines underlying the modeled  
8       clusters differ from that of the wire centers in Illinois. These two points alone  
9       indicate that not only are the costs calculated by Verizon too high, but that they do  
10      not even pertain to Illinois. My view remains that the ICM model and supporting  
11      documentation is not particularly flexible or open to inspection, although that is  
12      overshadowed by the problems with the costs calculated by the model. I  
13      recommend that the Illinois Commission reject the switched access costs that  
14      Verizon calculated using the ICM model, and reject the ICM model itself.

15   **Q.   DOES THIS CONCLUDE YOUR TESTIMONY?**

16   A.   Yes, it does.